Glaciers—Nature's Ice Sculptures
Comparing Mount Rainier and Mount Fuji Snow and Ice Cover

OBJECTIVE: Your goal is to determine whether Mount Rainier and Mount Fuji have glaciers. You will accomplish this goal by researching the effects of glaciers on landforms, making observations of images of both mountains and observing the topography of Mount Fuji and Mount Rainier.

STEP 1) Researching glacial landforms in the National Snow and Ice Data Center "All about glaciers" web page
Go to: http://nsidc.org/glaciers

1. **Use the links provided to research the effect of glaciers on topography and landforms. Use the following suggestions to guide your research.**

Glacier Story
- What climate conditions are necessary for glaciers to form?
- Describe the 3 stages of a glaciers life cycle.

General Info

Glossary
- Define the following terms arête, cirque, crevasse, esker, fjord, glacial trough, horn, and moraine

Gallery
- Where are glaciers usually found?
- What kinds of features and landforms do glaciers form?

Quick Facts
- What are the 3 most interesting facts about glaciers?

Q&A
- What is a glacier?
- How do glaciers affect the land?
- Why are glaciers important?
- How are glaciers dangerous?

STEP 2) Evidence of glaciers
What evidence would you expect to observe on Mount Rainier or Mount Fuji, if glaciers are or were ever present?

2. **As a group, on a separate sheet of paper make a list of 4-5 types of evidence that might "prove" that glaciers were present on either Mount Rainier or Mount Fuji**

STEP 3) Visualizing the three dimensional topography of Mount Rainier and Mount Fuji
Obtain a copy of the Mount Rainier and Mount Fuji map pages

3. **As you view the images consider the following question, "What evidence do you observe of glaciers on either of these volcanoes?"**

STEP 4) Conclusions
Now that you have had an opportunity to observe several different types of information, it's time to decide if glaciers can be found on either volcano.

4. **Write a 5-8 sentence paragraph describing your conclusions.**
Make sure that your paragraph includes all of the following points:
   - ✓ What is the research question that your are answering?
   - ✓ Why is answering this question important?
   - ✓ What is your answer to the research question?
   - ✓ What evidence do you have to support your answer?